



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20531  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/367,081	01/24/2000	JEAN-FRANCOIS PENNEAU	15675.P291	3851

7590 11/15/2002  
BLAKELY SOKOLOFF TAYLOR & ZAFMAN  
12400 WILSHIRE BOULEVARD  
7TH FLOOR  
LOS ANGELES, CA 90025

EXAMINER

VO, HAI

ART UNIT

PAPER NUMBER

1771

10

DATE MAILED: 11/15/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/367,081

Applicant(s)

PENNEAU ET AL.

Examiner

Hai Vo

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,4-9,25,30,33-51,53-71,74-92 and 95-115 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.

- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.

- 6) ☒ Claim(s) 1,4-9,25,30,33-51,53-71,74-92 and 95-115 is/are rejected.

- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.

- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_ 6) ☐ Other: \_\_\_\_

Art Unit: 1771

1. Claims 2, 3, 21, 26-29, 31, 32, 52, 72, 73, 93 and 94 have been cancelled in the amendment received on 08/23/02.

***Claim Objections***

2. Claims 1, 4-9, 25, 30, 33-51, 53-71, 74-92, and 95-115 are objected to because of the following informalities: the claims should begin with an article such as "A" or "The". Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1, 4-9, 25, 30, 33-51, 53-71, 74-92, and 95-115 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The amended claims include the filler having a specific surface greater than 300 m<sup>2</sup>/g. The upper limit specific surface is not supported anywhere in the specification. The specific surface originally ranges from 300 to 3000 m<sup>2</sup>/g (page 8, line 15 of the specification). The examiner wishes to point out that with respect to changing numerical range limitations, the analysis must take into account which ranges one skilled in the art would consider inherently supported by the discussion in the original disclosure. In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976). Therefore, the

amended claims are rejected on the ground that the claimed range is unsupported in the original disclosure since it encompasses values greater than 3000 g/m<sup>2</sup>.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, 6, 8, 9, 25, 30, 33, 35, 37-39, 41-53, 55, 57-59, 61-74, 76, 78-80, 82-95, 97, 99-101, 103-110, 113-115 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andersen et al (US 5,665,442). Andersen discloses a highly inorganically filled sheet with a homogeneous structure prepared from moldable mixture comprising an organic polymer binder and at least 20% by weight of inorganic filler (examples 1-6, column 21, lines 33-35). Andersen discloses silica fume having a high surface area and being incorporated into the porous composite sheet (column 26, lines 58-60). Since Andersen is using the same material as Applicant to form a filler of the porous composite product, i.e., inorganic particles or metallic particles, it is the examiner's position that the filler of Andersen would inherently possess the same specific surface as that of Applicant. In addition, the examiner wishes to point out that as the USPTO is unequipped to perform the necessary experimentation, the burden of showing the filler of Andersen outside the instantly claimed range is shifted to Applicant.

Andersen is silent as to the mean diameter of the pore in the product. However, such a variable would have been recognized by one skilled in the art to control the degree of porosity of the film. As such, in the absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the sheet having the pore size instantly claimed since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

With regard to claims 4, 6, 33, 35, 37, 38, 53, 55, 57, 58, 74, 76, 78, 79, 112, and 113, Andersen discloses suitable synthetic organic binder being poly(vinyl alcohol), acrylic polymer (column 24, lines 11-19).

With regard to claims 45, 46, 48, 49, 51, 66, 68, 69, 87, 88, 90, and 91, since the article of Andersen is made of the same materials and produced by the same extrusion process. It is the examiner's position that the article of Andersen would inherently exhibit a BET specific surface and a tensile strength within the ranges as claimed by the present invention.

With regard to claim 25, it has been held that a recitation with respect to the manner in which a claimed composite product is intended to be employed does not differentiate the claimed composite product from a prior art laminated sheet satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

With regard to claims 39, 59, 80, and 114, Andersen is silent as to the molecular weight range of polyether. However, such a variable would have been recognized by one skilled in the art to obtain an ease of handling and processing the matrix material. As such, in the absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the sheet having the polyether with the molecular weight instantly claimed since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

With regard to claims 92, 95, 97, 99-101, and 103-110, Andersen is silent as to the granule shape of the composite product. *In re Dailey*, 149 USPQ 47 (CCPA 1976), there is nothing on the record that convinces the examiner that the particular shape of the composite product is significant or is anything more than one of numerous shapes a person of ordinary skill in the art would find obvious for the purpose of providing the shape of the composite product, therefore, the shape of the composite product in itself would not render the claims patentable over Andersen. See *Graham v. John Deere Co.*,

6. Claims 34, 54, 75, 96 and 111 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andersen et al (US 5,665,442) as applied to claims 1, 30, 51, 71, 92 in view of Rakestraw et al (US 5,458,836) substantially as set forth in Paper no. 8.

7. Claims 5, 7, 36, 40, 56, 60, 77, 81, 98, and 102 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andersen et al (US 5,665,442) as applied to claims 1, 30, 51, 71, and 92 in view of Coughlin (US 4,403,007) substantially as set forth in Paper no. 8.

***Response to Arguments***

8. The claim objections and 102 art rejections over Andersen have been overcome by the present amendment and response.
9. The 103 art rejections over Andersen have been maintained because of the following reasons. At the first place, Applicant argues that the void created in the product of Andersen must essentially be closed void and consequently these voids do not contribute to the high specific surface of the product of Andersen. The arguments are not commensurate with the scope of the claims since there is nothing specific about the nature of the voids in the claims, i.e., open celled or a close-celled foam. Second, as long as Andersen is using the same material such as porous ceramics, clay, etc. to form a filler of the product as Applicant, the examiner maintains that the filler would inherently have the same specific surface within the range as set forth in the claims. Finally, since the product of Andersen is made of the same materials and produced by the same extrusion process as Applicant, it is the examiner position that pore size would be inherently present.
- \*The examiner suggests that Applicant needs to be more specific about the nature of filler such as active charcoal to overcome the art rejections.

***Conclusion***

**10. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (703) 605-4426. The examiner can normally be reached on Tue-Fri, 8:30-6:00 and on alternating Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.



Art Unit: 1771

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

HV

November 5, 2002

  
TERREL MORRIS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700